

FIG. 1A

gggcaggaagacggcgctgcccgaggagc																				-153
ggggcgggcgggcgcgcggggagcgggcgggcggggagccagggcgggcgggcgggcgggcgggcgccag																				-77
aagaggcgggcgggcgcgctccggccggtctgcggcggttgcccttggtttggctttggcgggcggtggagaag																				-1
ATG	CTG	CAG	TCC	CTG	GCC	GGC	AGC	TCG	TGC	GTG	CGC	CTG	GTG	GAG	CGG	CAC	CGC	TCG		57
M	L	Q	S	L	A	G	S	S	C	V	R	L	V	E	R	H	R	S		19
GCC TGG TGC TTC GGC TTC CTG GTG CTG GGC TAC TTG CTC TAC CTG GTC TTC GGC GCA																				114
A	W	C	F	G	F	L	V	L	G	Y	L	L	Y	L	V	F	G	A		38
GTG GTC TTC TCC TCG GTG GAG CTG CCC TAT GAG GAC CTG CTG CGC CAG GAG CTG CGC																				171
V	V	F	S	S	V	E	L	P	Y	E	D	L	L	R	Q	E	L	R		57
AAG CTG AAG CGA CGC TTC TTG GAG GAG CAC GAG TGC CTG TCT GAG CAG CAG CTG GAG																				228
K	L	K	R	R	F	L	E	E	H	E	C	L	S	E	Q	Q	L	E		76
CAG TTC CTG GGC CGG GTG CTG GAG GCC AGC AAC TAC GGC GTG TCG GTG CTC AGC AAC																				285
Q	F	L	G	R	V	L	E	A	S	N	Y	G	V	S	V	L	S	N		95
GCC TCG GGC AAC TGG AAC TGG GAC TTC ACC TCC GCG CTC TTC TTC GCC AGC ACC GTG																				342
A	S	G	N	W	N	W	D	F	T	S	A	L	F	F	A	S	T	V		114
CTC TCC ACC ACA GGT TAT GGC CAC ACC GTG CCC TTG TCA GAT GGA GGT AAG GCC TTC																				399
L	S	T	T	G	Y	G	H	T	V	P	L	S	D	G	G	K	A	F		133
TGC ATC ATC TAC TCC GTC ATT GGC ATT CCC TTC ACC CTC CTG TTC CTG ACG GCT GTG																				456
C	I	I	Y	S	V	I	G	I	P	F	T	L	L	F	L	T	A	V		152
GTC CAG CGC ATC ACC GTG CAC GTC ACC CGC AGG CCG GTC CTC TAC TTC CAC ATC CGC																				513
V	Q	R	I	T	V	H	V	T	R	R	P	V	L	Y	F	H	I	R		171
TGG GGC TTC TCC AAG CAG GTG GTG GCC ATC GTC CAT GCC GTG CTC CTT GGG TTT GTG																				570
W	G	F	S	K	Q	V	V	A	I	V	H	A	V	L	L	G	F	V		190
ACT GTG TCC TGC TTC TTC TTC ATC CCG GCC GCT GTC TTC TCA GTC CTG GAG GAT GAC																				627
T	V	S	C	F	F	F	I	P	A	A	V	F	S	V	L	E	D	D		209

FIG. 1B-1

TGG AAC TTC CTG GAA TCC TTT TAT TTT TGT TTT ATT TCC CTG AGC ACC ATT GGC CTG	684
W N F L E S F Y F C F I S L S T I G L	228
GGG GAT TAT GTG CCT GGG GAA GGC TAC AAT CAA AAA TTC AGA GAG CTC TAT AAG ATT	741
G D Y V P G E G Y N Q K F R E L Y K I	247
GGG ATC ACG TGT TAC CTG CTA CTT GGC CTT ATT GCC ATG TTG GTA GTT CTG GAA ACC	798
G I T C Y L L L G L I A M L V V L E T	266
TTC TGT GAA CTC CAT GAG CTG AAA AAA TTC AGA AAA ATG TTC TAT GTG AAG AAG GAC	855
F C E L H E L K K F R K M F Y V K K D	285
AAG GAC GAG GAT CAG GTG CAC ATC ATA GAG CAT GAC CAA CTG TCC TTC TCC TCG ATC	912
K D E D Q V H I I E H D Q L S F S S I	304
ACA GAC CAG GCA GCT GGC ATG AAA GAG GAC CAG AAG CAA AAT GAG CCT TTT GTG GCC	969
T D Q A A G M K E D Q K Q N E P F V A	323
ACC CAG TCA TCT GCC TGC GTG GAT GGC CCT GCA AAC CAT TGA gcgtaggatttgttcatt	1030
T Q S S A C V D G P A N H *	337
atgctagagcaccaggggtcagggtgcaaggaagggcttaagtatgttcatttttatcagaatgcaaaagcgaaaa	1106
ttatgtcactttaagaaatagctactgtttgcaatgtcttattaaaaacaacaaaaaagacacatggaacaaag	1182
aagctgtgaccccagcaggatgtctaataatgtgaggaaatgagatgtccacctaaaattcatatgtgacaaaatta	1258
tctcgaccttacataggaggagaatacttgaagcagtatgctgctgtggttagaagcagattttatacttttaact	1334
ggaaactttggggtttgcatttagatcatttagctgatggctaaatagcaaaatttatatttagaagcaaaaaaa	1410
aaagcatagagatgtgtttataaaatagggttatgtgtactggtttgcatgtacccacccaaaatgattattttg	1486
gagaatctaagtcaaaactcactatttataatgcataggttaaccattaactatgtacatataaagtataaatatgtt	1562
tatattctgtacatatgggttaggtcaccagatcctagtgtagttctgaaactaagactatagatattttgtttct	1638
tttgatttctctttataactaaagaatccagagttgctacaataaaataagggaataataaaaaaaaaaaaaa	1712

FIG. 1B-2

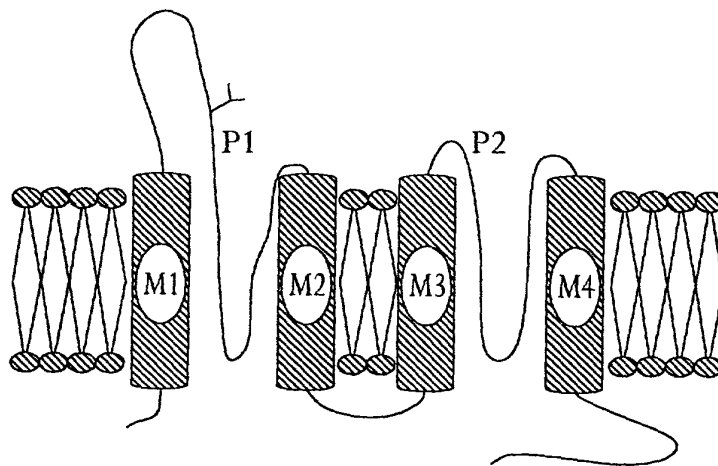
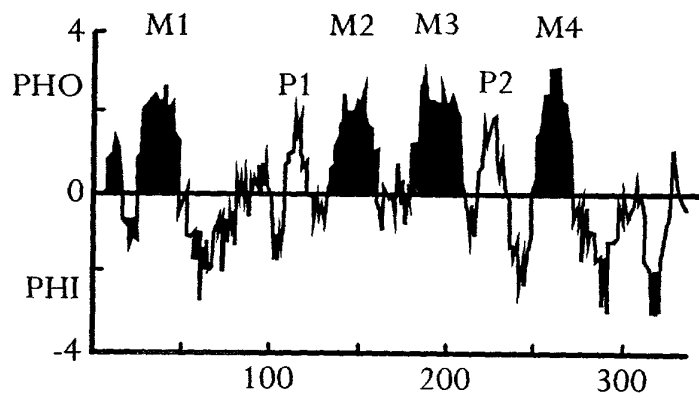


FIG. 1C

	1	14	27
TWIK-1 P1	FTSALFEASTVLSTTCGYGHTVPLSDGG		
TWIK-1 P2	ELESFYECFISLSTTIGLGDYVPGEYN		
TOK1 P2	YFNCIYECFELCLLTTCGYGDYAPRTGAG		
TOK1 P1	YGNALYECTVSELLTVGLGDTLPKSVGA		
Slo	YWTICVYFLIVTMTSTVGYGDVYCETVLG		
Shaker	IPDAFWWAVVTMTTVGYGDMTPVGFVG		
Shab	IPEAFWWAGITMTTVGYGDIPTTALG		
Shal	IPAAFWYTIVTMTTLGYGDMVPETTAG		
Shaw	IPLGLWVALVTMTTVGYGDMARKTYIG		
KAT1	YVTALYWSITTLTTLTTCGYGDFHAENPRE		
AKT1	YVTSMYWSITTLTTLTVGYGDIHPVNTKE		
eag	YVTALYFTMTCTMTSVGEGNVAAETDNE		
ROMK1	MTSAFLFSLETQVTTLGYGFRFVTEQCA		
IRK1	FTAAFLFSLETQTTTIGYGFRCVTDECP		
GIRK1	FPSAFLFFLETEATTCGYGYRITDKCP		

FIG. 2A

TWIK-1 1 M L Q S E A G S S C V R E V E ----- E H R S A W C F -- G ----- L V L G Y  
 f17c8 1 M Y T D E G E Y S G D T D H G G S T M Q K M S P N T R O N F R O N V N V V C I S A A T L --  
 M110-2 1 M T V S M E E N S K I O M S A T S K D K K V A T D R S L L N K Y H L G P L A H T G L V L S C

TWIK-1 31 L E Y L V F G A V V F S S V E L P Y E D L L R O E ----- L R K L K R R F L E E H E C --- L  
 f17c8 47 L V E N L I G A G E F ----- Y L A T O N S S E S  
 M110-2 49 V T Y A L G G A Y L F L S I E H P - E E L K R R E K A I R E F O D L K Q O F M C N I T S G I E N

TWIK-1 71 S E Q O L E O F L G R V L ----- E A S N Y G V S V L S N A S G N W N W -- D F T S A L F  
 f17c8 69 L N E N S E V -- S K C L H N L P I G G K I T A E M K S K L G K C I T K S S R I D G F G K A I F  
 M110-2 96 S E Q S I E Y T K K L L M L E D A H N A H A E Y F F L N R E I P K D M W -- T F S S A L V

P1

TWIK-1 110 F A S T V E S T T G Y G H T V P E S D G G K A F C I L - Y S V E G I P F T L L F L T A V V O R I  
 f17c8 115 F S W T E Y S T V G Y G S L P H S T L G R Y L T I F - Y S L L M I P V F I A R K F E F G T E L  
 M110-2 142 F T T T V I P V G Y G Y L E P V S A Y C R - M C L I A Y A L L G I P L L V T M A D T G R F A

TWIK-1 157 T V H --- V T R R P V L ----- Y E H R W G S K O V V A I V H A V L G E V T V S C F F  
 f17c8 162 A H F L V V S N R T R L A V K K A Y K E S - O N P E N A E T P S N S L O H D Y L I F L S S I  
 M110-2 189 A Q L --- V T R ----- W - F G D N M A I P A A I F V ----- C L I

P2

TWIK-1 197 F E - P A A V F S --- V L - E D D W N E L E S F Y F C F I S E S T I C L G D Y V R G E G Y N  
 f17c8 209 L L C S E S L L S S A F S S I E N I S Y L S S V Y F G I T M F L I G I G D I V P T N ---  
 M110-2 213 F A Y P L V V G F --- L C S T S N I T Y L S V I F S I T S I F T I C F G D I P ---

TWIK-1 239 Q K F R E E Y K T G E F C Y L L G L I A M L V L E T F C ----- E L H E L K K R -----  
 f17c8 254 ----- L V W F S G Y C M L F L I S D V L S N Q I F Y F C Q A R V Y F F H I L A R K E L  
 M110-2 253 ----- D M N V I H M V L E L A V G Y L V T I T L D I V A --- A E M I D R V H Y M C R H V G

TWIK-1 278 ----- K M E Y V K K D K D E D Q V H I T E H D O L --- S F S S E T D Q A A G M K E D  
 f17c8 295 L L R E - E D D G F O L E T T V S L O H E P I I N S Q C M P S L --- V L D C E K E E L O N D  
 M110-2 294 K A K E L A G K M F O L A Q S L N K O G L V S G V G O L H A L A R F C M L V G R E E V D K T Q

TWIK-1 315 Q K O N E P E V A T ----- Q S S A C V D G P A N H ---  
 f17c8 338 E K L I S S L E S T -----  
 M110-2 342 E D G L I A F S P D V M D G L E F M D T L S I Y S R R S R R S A E N S A R N L F L S

FIG. 2B

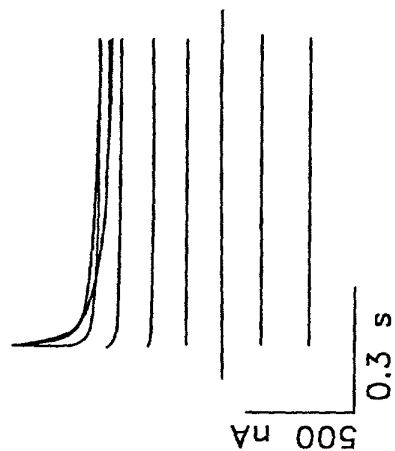


FIG. 3A

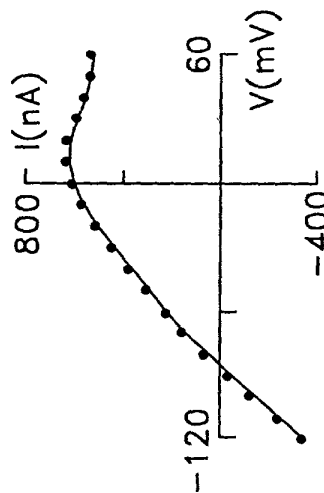


FIG. 3B

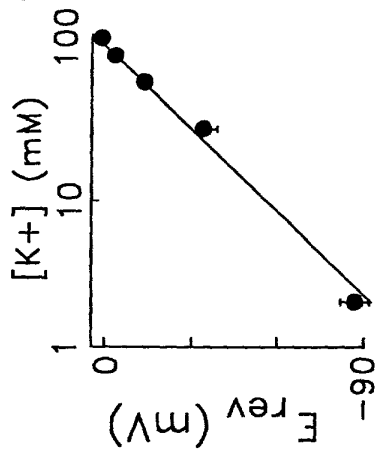


FIG. 3C

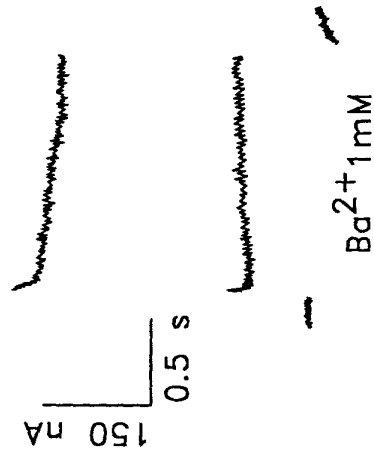


FIG. 3D

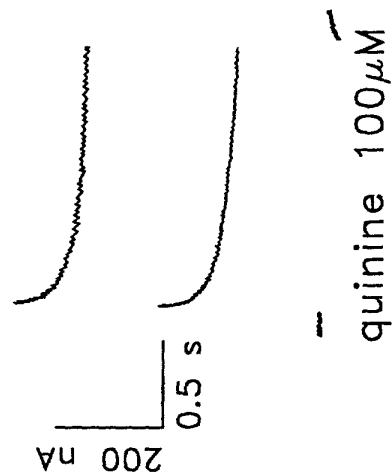


FIG. 3E

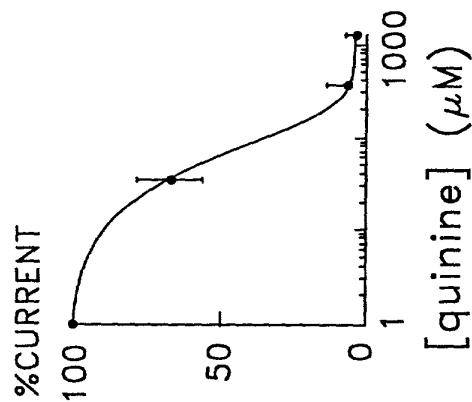


FIG. 3F

FIG. 4A

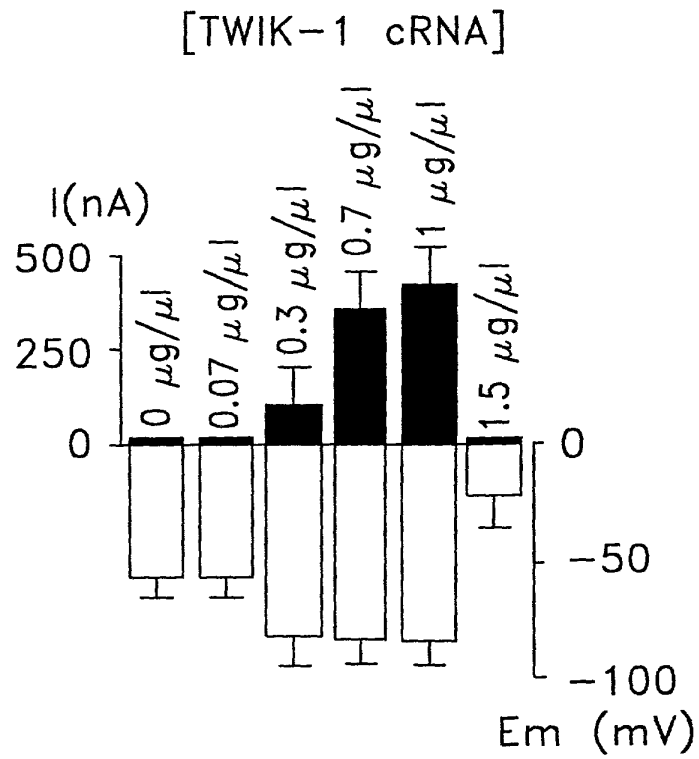


FIG. 4B

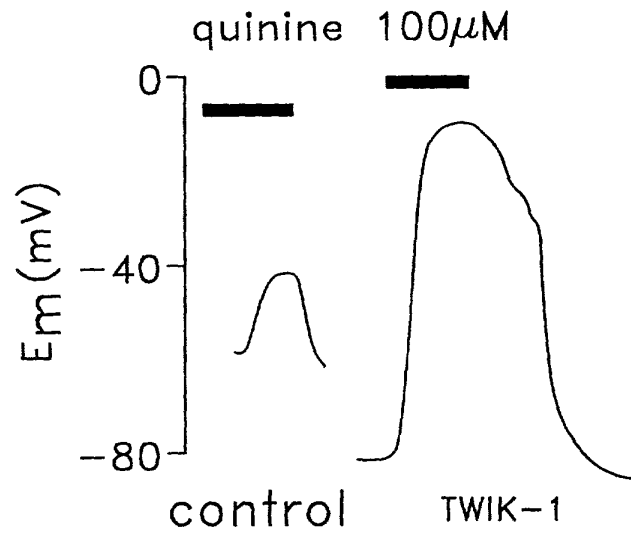
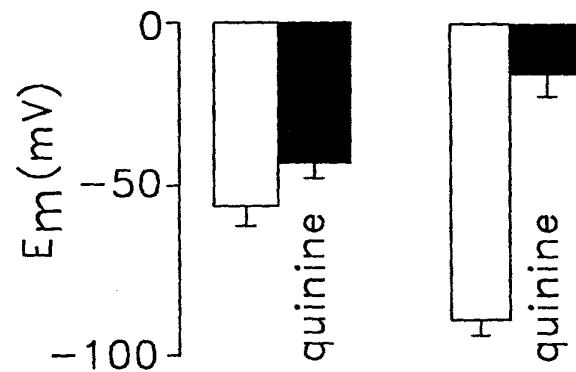


FIG. 4C





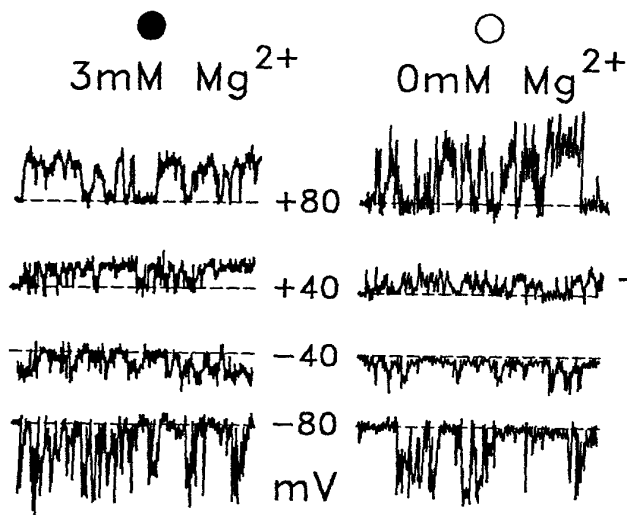


FIG. 5A

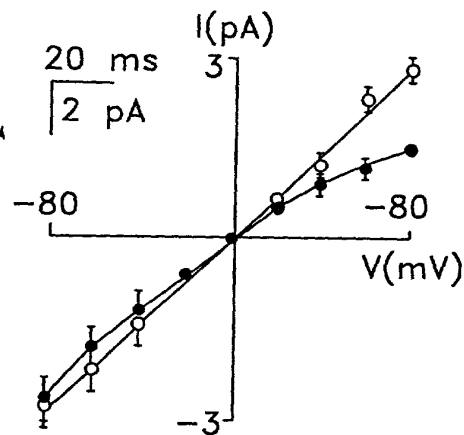


FIG. 5B

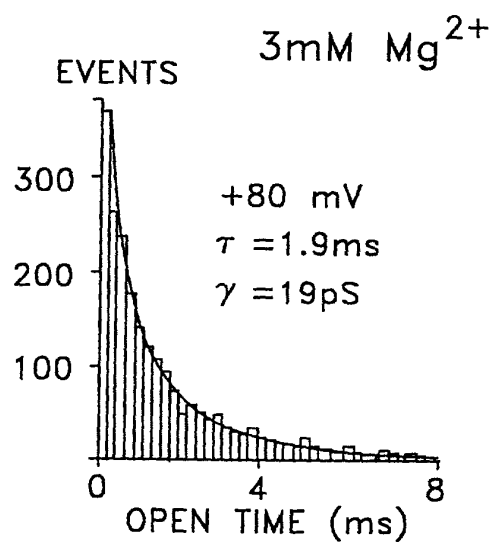


FIG. 5C

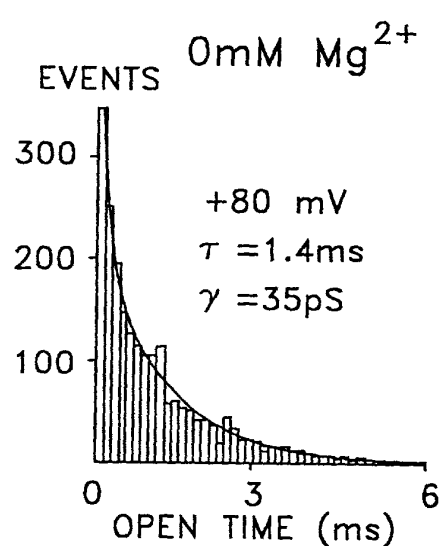
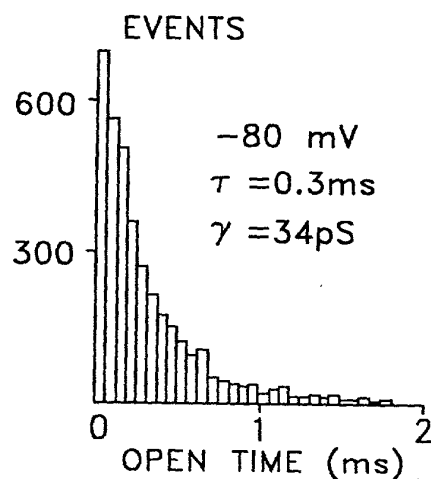
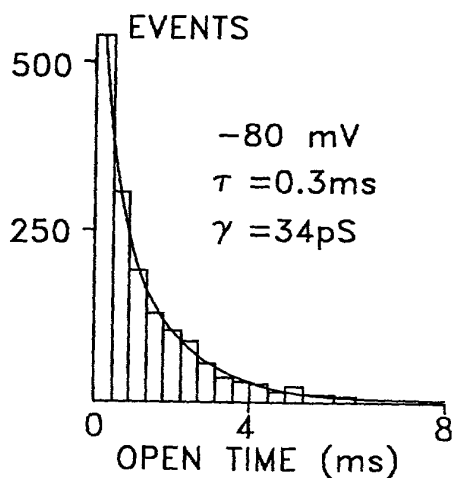


FIG. 5D



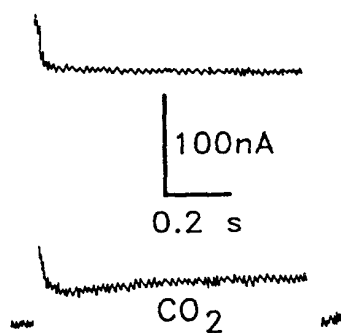


FIG. 6A

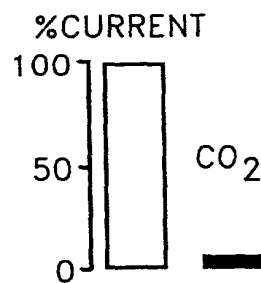


FIG. 6B

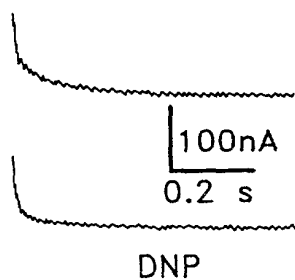


FIG. 6C

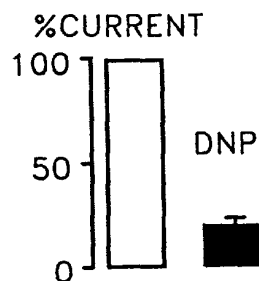


FIG. 6D

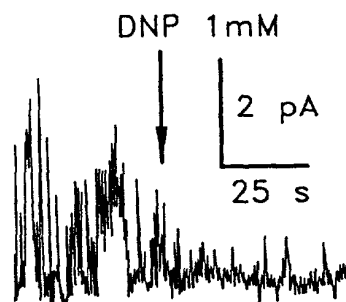


FIG. 6E

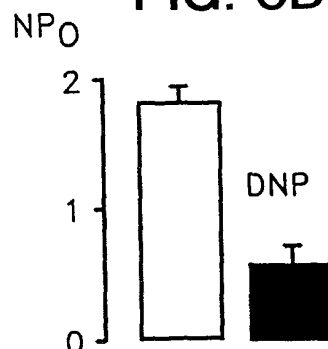


FIG. 6F

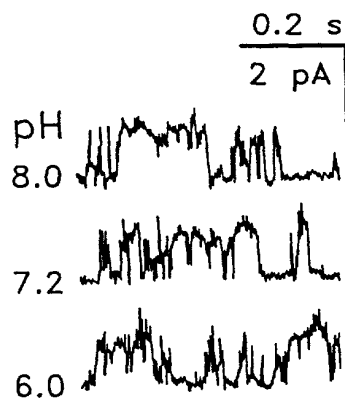


FIG. 6G

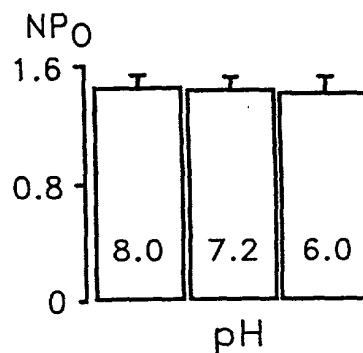


FIG. 6H

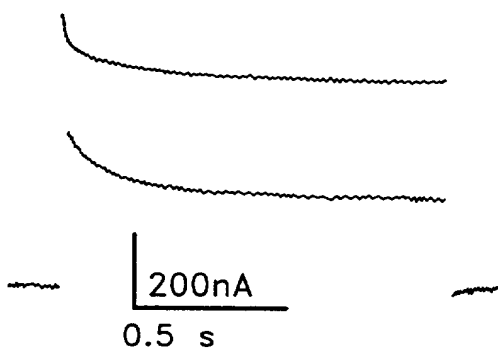


FIG. 7A

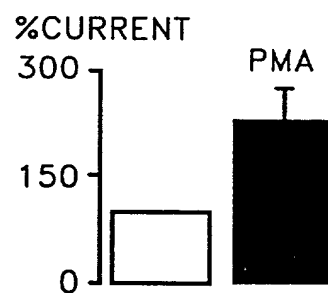


FIG. 7B

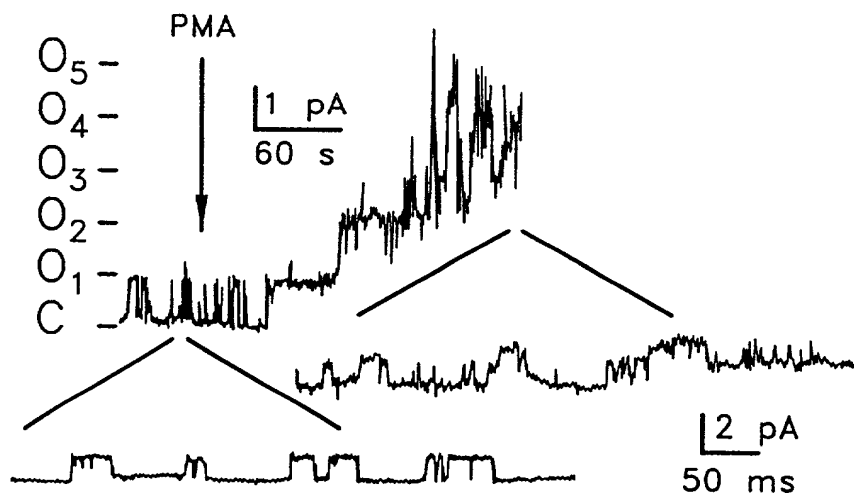


FIG. 7C

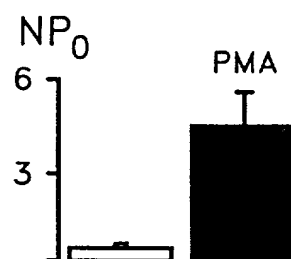


FIG. 7D

1201-CIP-DIV-2-00  
 Fabrice Duprat, et al  
 Family of Mammalian Potassium Channels, Their Cloning  
 And Their Use, Especially for The Screening of Drugs

```

                                tgccctgcgcgatagcgggcgagcgagccatgccccagggcgctccg -77
gggcagcagcagcgggcgccggggccgatgcgcgggcgggggcgccggggcgccggcgggcgccggggcg -1

ATG AAG CGG CAG AAC GTG CGC ACG CTG GCG CTC ATC GTG TGC ACC TTC ACC TAC CTG 57
M  K  R   Q  N  V  R  T  L  A  L  I  V  C  T  F  T  Y  L 19
      E  N  V  R  T  L  A  L  I  V  C  T  F  T  Y  L

CTG GTG GGC GCC GCG GTC TTC GAC GCG CTG GAG TCG GAG CCC GAG CTG ATC GAG CGG 114
L  V  G  A  A  V  F  D  A  L  E  S  E  P  E  L  I  E  R 38
L  V  G  A  A  V  F  D  A  L  E  S  E  P  E  M  I  E  R

CAG CGG CTG GAG CTG CGG CAG CAG GAG CTG CGG GCG CGC TAC AAC CTC AGC CAG GGC 171
Q  R  L  E  L  R  Q  Q  E  L  R  A  R  Y  N  L  S  Q  G 57
Q  R  L  E  L  R  Q  L  E  L  R  A  R  Y  N  L  S  E  G
                                     *

GGC TAC GAG GAG CTG GAG CGC GTC GTG CTG CGC CTC AAG CCG CAC AAG GCC GGC GTG 228
G  Y  E  E  L  E  R  V  V  L  R  L  K  P  H  K  A  G  V 76
G  Y  E  E  L  E  R  V  V  L  R  L  K  P  H  K  A  G  V

CAG TGG CGC TTC GCC GGC TCC TTC TAC TTC GCC ATC ACC GTC ATC ACC ACC ATC GGC 285
Q  W  R  F  A  G  S  F  Y  F  A  I  T  V  I  T  T  I  G 95
Q  W  R  F  A  G  S  F  Y  F  A  I  T  V  I  T  T  I  G

TAC GGG CAC GCG GCA CCC AGC ACG GAT GGC GGC AAG GTG TTC TGC ATG TTC TAC GCG 342
Y  G  H  A  A  P  S  T  D  G  G  K  V  F  C  M  F  Y  A 114
Y  G  H  A  A  P  S  T  D  G  G  K  V  F  C  M  F  Y  A

CTG CTG GGC ATC CCG CTC ACG CTC GTC ATG TTC CAG AGC CTG GGC GAG CGC ATC AAC 399
L  L  G  I  P  L  T  L  V  M  F  Q  S  L  G  E  R  I  N 133
L  L  G  I  P  L  T  L  I  M  F  Q  S  L  G  E  R  I  N

ACC TTG GTG AGG TAC CTG CTG CAC CGC GCC AAG AAG GGG CTG GGC ATG CGG CGC GCC 456
T  L  V  R  Y  L  L  H  R  A  K  K  G  L  G  M  R  R  A 152
T  E  V  R  Y  L  L  H  R  A  K  R  G  L  G  M  R  H  A

GAC GTG TCC ATG GCC AAC ATG GTG CTC ATC GGC TTC TTC TCG TGC ATC AGC ACG CTG 513
D  V  S  M  A  N  M  V  L  I  G  F  F  S  C  I  S  T  L 171
E  V  S  M  A  N  M  V  L  I  G  F  V  S  C  I  S  T  L

TGC ATC GGC GCC GCC GGC TTC TCC CAC TAC GAG CAC TGG ACC TTC TTC CAG GCC TAC 570
C  I  G  A  A  A  F  S  H  Y  E  H  W  T  F  F  Q  A  Y 190
C  I  G  A  A  A  F  S  Y  Y  E  R  W  T  F  F  Q  A  Y

TAC TAC TGC TTC ATC ACC CTC ACC ACC ATC GGC TTC GGC GAC TAC GTG GCG CTG CAG 627
Y  Y  C  F  I  T  L  T  T  I  G  F  G  D  Y  V  A  L  Q 209
Y  Y  C  F  I  T  L  T  T  I  G  F  G  D  Y  V  A  L  Q

AAG GAC CAG GCC CTG CAG ACG CAG CCG CAG TAC GTG GCC TTC AGC TTC GTC TAC ATC 684
K  D  Q  A  L  Q  T  Q  P  Q  Y  V  A  F  S  F  V  Y  I 228
K  D  Q  A  L  Q  T  Q  P  Q  Y  V  A  F  S  F  V  Y  I

CTT ACG GGC CTC ACG GTC ATC GGC GCC TTC CTC AAC CTC GTG GTG CTG CGC TTC ATG 741
L  T  G  L  T  V  I  G  A  F  L  N  L  V  V  L  R  F  M 247
L  T  G  L  T  V  I  G  A  F  L  N  L  V  V  L  R  F  M
  
```

FIG. 8A

ACC	ATG	AAC	GCC	GAG	GAC	GAG	AAG	CGC	GAC	GCC	GAG	CAC	CGC	GCG	CTG	CTC	ACG	CGC	798	
T	M	N	A	E	D	E	K	R	D	A	E	H	R	A	L	L	T	R	266	
T	M	N	A	E	D	E	K	R	D	A	E	H	R	A	L	L	T	H		
AAC	GGG	CAG	GCG	GGC	GGC	GGC	GGA	GGG	GGT	GGC	AGC	GCG	CAC	ACT	ACG	GAC	ACC	GCC	855	
N	G	Q	A	G	G	G	G	G	G	G	S	A	H	T	T	D	T	A	285	
N	G	Q	A	V	G	L	G	G	L	S	C	L	S	G	S	L	G	D		
TCA	TCC	ACG	GCG	GCA	GCG	GGC	GGC	GGC	GGC	TTC	CGC	AAC	GTC	TAC	GCG	GAG	GTG	CTG	912	
S	S	T	A	A	A	G	G	G	G	F	R	N	V	Y	A	E	V	L	304	
<u>VRPRDPV</u>	<u>TC</u>	<u>AA</u>	<u>A</u>	<u>A</u>	<u>G</u>	<u>GVGVGVGGS</u>	<u>G</u>	<u>F</u>	<u>R</u>	<u>N</u>	<u>V</u>	<u>Y</u>	<u>A</u>	<u>E</u>	<u>V</u>	<u>L</u>				
CAC	TTC	CAG	TCC	ATG	TGC	TCG	TGC	CTG	TGG	TAC	AAG	AGC	CGC	GAG	AAG	CTG	CAG	TAC	969	
H	F	Q	S	M	C	S	C	L	W	Y	K	S	R	E	K	L	Q	Y	323	
H	F	Q	S	M	C	S	C	L	W	Y	K	S	R	E	K	L	Q	Y		
TCC	ATC	CCC	ATG	ATC	ATC	CCG	CGG	GAC	CTC	TCC	ACG	TCC	GAC	ACG	TGC	GTG	GAG	CAG	1026	
S	I	P	M	I	I	P	R	D	L	S	T	S	D	T	C	V	E	Q	342	
S	I	P	M	I	I	P	R	D	L	S	T	S	D	T	C	V	E	H		
AGC	CAC	TCG	TCG	CCG	GGA	GGG	GGC	GGC	CGC	TAC	AGC	GAC	ACG	CCC	TCG	CGA	CGC	TGC	1083	
S	H	S	S	P	G	G	G	G	R	Y	S	D	T	P	S	R	R	C	361	
S	H	S	S	P	G	G	G	G	R	Y	S	D	T	P	S	H	P	C		
CTG	TGC	AGC	GGG	GCG	CCA	CGC	TCC	GCC	ATC	AGC	TCG	GTG	TCC	ACG	GGT	CTG	CAC	AGC	1140	
L	C	S	G	A	P	R	S	A	I	S	S	V	S	T	G	L	H	S	380	
L	C	S	G	T	Q	R	S	A	I	S	S	V	S	T	G	L	H	S		
CTG	TCC	ACC	TTC	CGC	GGC	CTC	ATG	AAG	CGC	AGG	AGC	TCC	GTG	TGA	ctgccccgaggggacc				1200	
L	S	T	F	R	G	L	M	K	R	R	S	S	V	*					395	
L	A	A	F	R	G	L	M	K	R	R	S	S	V							
tggagc	acctg	ggggg	cgcg	ggggg	ggggg	gaccc	ctg	ctg	ggg	agg	ccagg	agact	gcccc	ctg	ctg	cctt	ctg	cccc	agt	1276
ggacccc	gcaca	acatc	ccctc	accact	ctcccc	cagc	accccc	atctc	cgact	gtg	cctg	cttgc	accag	ccgg	ca					1352
ggaggc	cggg	ctctg	gagg	accc	ctggg	gcccc	atcg	gag	ccctg	caa	attcc	gagaa	atgtg	aaact	tggt	gggg				1428
tcaggg	gagga	aaagg	caga	agctg	ggg	agc	ctcc	cttcc	cttgg	aaa	atcta	aga	agctc	ccag	tcc	cag	agac	cc		1504
gctggt	accac	acccc	ac	cttcc	ggagg	ggg	actt	catg	ttcc	gtg	acgt	ttg	cat	ctct	attt	tata	ctct	gt	cc	1580
gctagg	tctcc	ac	cttcc	cttgg	ttcc	aaa	agcc	agg	gtgt	ctat	gtcca	agtc	acccc	tact	cag	cccc	actcc			1656
ccttcc	tcac	cccc	ag	ctgt	gtct	ccca	ac	ctcc	cttgc	gtgt	gtttt	gcat	gg	ctttg	cag	ttat	gg	gaa	agt	1732
gaaaccc	agcag	tc	ctaa	agctg	ggtc	ccc	agaaa	gcagg	acagaa	gaagg	agggg	acagg	cagg	cag	cagg	agg				1808
gcgag	ctggg	aggc	aggc	aggc	ggc	ctgt	cag	ctgc	aga	atggt	cg	actgg	aggtt	caag	cta	actg	gc	ctc		1884
cagcc	acatt	ctcat	agcag	gtagg	acttc	agc	cttcc	agac	actg	ccctt	aga	atctg	gaac	aga	agact	tcaga				1960
ctcacc	ataatt	gctg	ataatt	accact	ctttaa	attgt	gcag	tgatt	tttt	tag	cctct	gaaa	actct	atg	ctggc					2036
cactg	attc	ctttg	agtct	cacaaa	acc	ctact	tag	gtcat	cagg	gcagg	agtt	ctc	act	ccc	attt	tac	agat	ga		2112
gaata	actg	aggc	ctgg	acag	gtga	agtga	acc	agag	agca	aaagg	caa	agg	gggtg	gggg	gctgg	gtg	cagt	gg	ctc	2188
acctg	tatt	ccca	ac	acttt	ggagg	ctgag	gttgg	agg	attg	ctt	gag	ccc	agga	attc	gag	acc	cag	c	tag	2264
acatag	tgag	accc	atct	ctac	aaaa	ata	aaaa	att	aacc	agg	tggtg	gcac	gtg	cctgg	gag	tccc	ag	cga		2340
cttggg	agg	ctg	agg	tgagg	attg	ttg	agc	ctgg	agg	tcagg	ctgt	ag	gc	cctg	attg	cacc	actg	ta		2416
ctccag	cctgg	gtg	acag	ggca	agac	cc	gtct	ca	aaaa	aaaaaaaa										2465

FIG. 8B

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	1	-----MLQSLAGSSCVR-----LVERHRS---
	1	MAAPDILLDPKSAAQNSKPRLSFSSKPTVLASRVESDSA
	1	-----MKR-----Q-NVR-----
		M1
TWIK-1	20	----AWCFGFLVLCGYLLYLVRGAVVFSSVELPYEDIL
TREK-1	39	INVMKWKTVSTIFLVVVLYLIIGAAVFKALEQOEISQ
TASK	8	-----TLALIVCTFTYLLVGAAVFDALESEPELIE
		P1
TWIK-1	53	RQELERKLRKRRFLEKEHCELSRQOLEOFLGRVLEASNYGV
TREK-1	77	RTTIVIQKQTFEAOHACVNSTELDELQQIVAAINAST
TASK	38	RQRLELRQOELRARNYLSQGG-YEELERVVLRLKPKHA
		P1
TWIK-1	91	SVLSNASG-NWNNDFTSALFFASTVLSTGYGHTVPLS
TREK-1	115	IPLECNSSNQVSHNDLGSFFFACTVITTIGEGNISPRIT
TASK	75	Q-----VQ-NRFAGSEFYFALTIVITTIGYGHAA PST
		M2
TWIK-1	128	DGGAFCIIYSVIGIPETLLLELTAVVORI TVHVTR--R
TREK-1	153	DGGKIFCIIYALLGIPLGFI LAGVGDQIGTIFGKGA
TASK	104	DGGKVFCMFIYALLGIPLTLVMFOSIGERIINTLVRY---
		M3
TWIK-1	164	PVLYFHIRWGFSKQVVAIVHAVLIGFVTVSCFPIPA
TREK-1	191	KVEDTFIKVNVSO TKIRIISTITFILFGCVLEFALPAV
TASK	139	LHRAKKGLGMRRADVSMANMVLIGFFSCISTLCIGAA
		P2
TWIK-1	202	VFSVLEDDWNFLSFYFCFISLSTIGLG DYVPGE-GYN
TREK-1	229	IFKHIEG-NSALDAIYFVITLTTIGFGDYVAG-GSD
TASK	177	AFSHYEH-ITFEOAVYVCFITLTTIGFGDYVALQKDQA
		M4
TWIK-1	239	OKFRELYKIGITCYLLGLLIAMLVLETFCEDHEKKF
TREK-1	264	IEYLDFYKPVVWFILVGLAYFAAVLSMIGDWLRVSK
TASK	214	LQTQPOYVAFSEFVILTGLTVIGAFNLVLREMTNA
		P2
TWIK-1	277	RKMFYVKKDKD-----
TREK-1	302	KTKEEVGEFR-----
TASK	252	EDEKRDAEHRALLTRNGQAGGGGGGSAHTTDTASSTA
		P2
TWIK-1	288	-----EDQVHIIEHDQLSESSITDOAAAGMK--
TREK-1	312	-----AHAAEW TANVTAEFKETRRRLSVEI--
TASK	290	AAGGGGFRNVYA EVLH PQSMCSCLWYKSRK LQYSIPM
		P2
TWIK-1	313	---EDQKQNEPFVATQSSACVDGPANH-----
TREK-1	337	---YDKFQ RATS VKRKLSAELAGNHNQELTPCMRTCL-
TASK	328	IIPRDLSTSDTCVEQSHS SPGGGGRYS DTPSRRLCLSG
		P2
TWIK-1	337	-----
TREK-1	371	-----
TASK	366	APRSAISSVSTGLHSLSTFRGLMKRRSSV

FIG. 9A

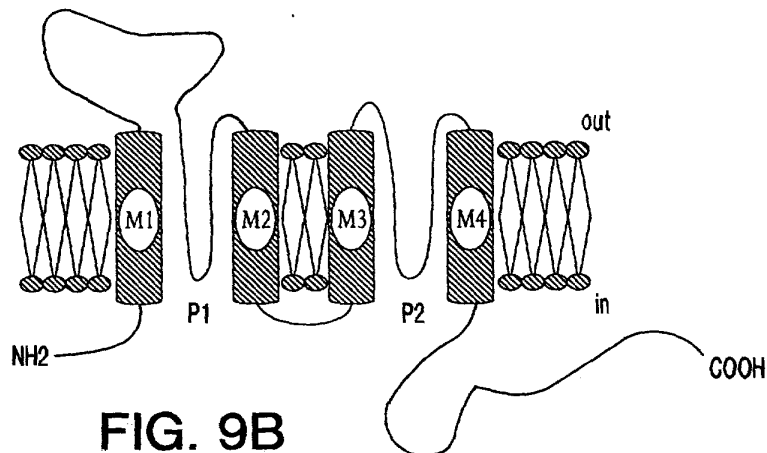


FIG. 9B

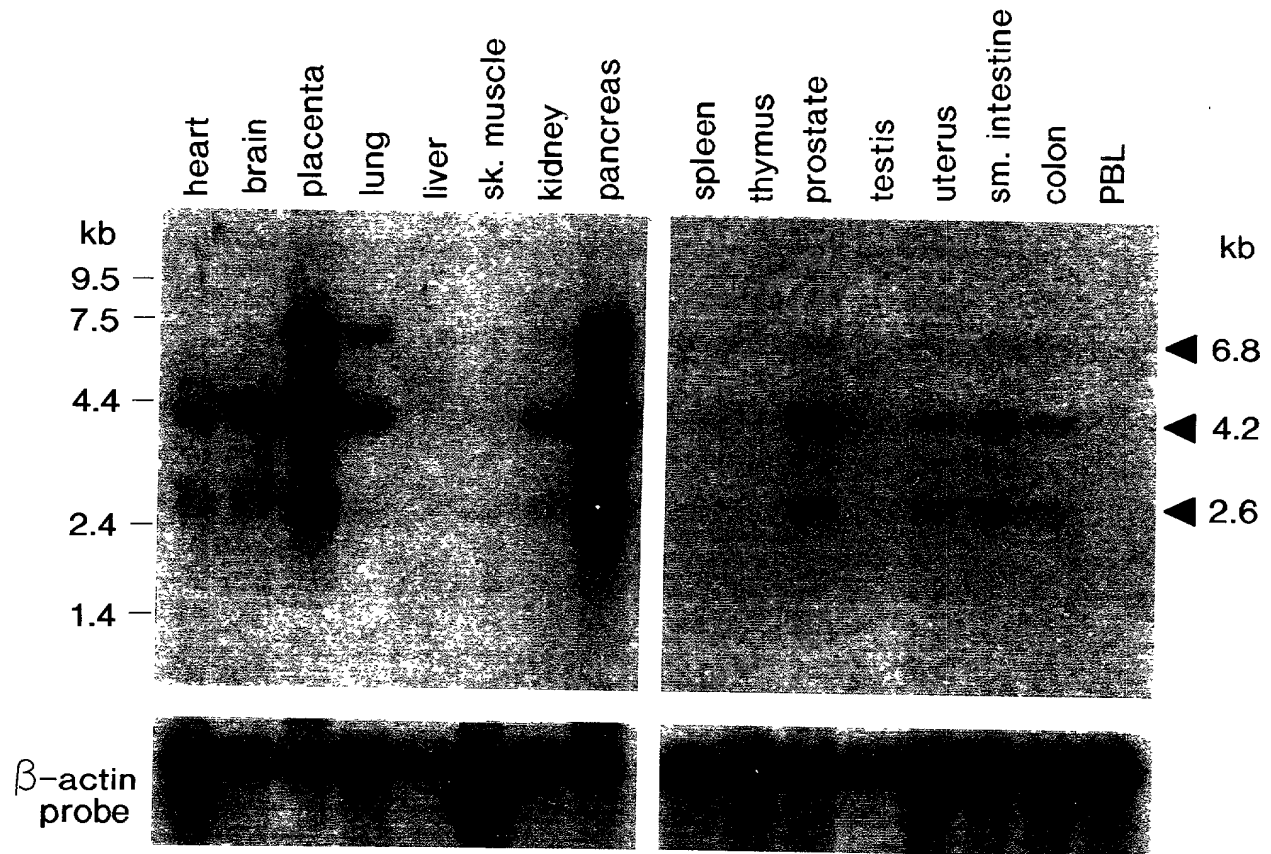


FIG. 10

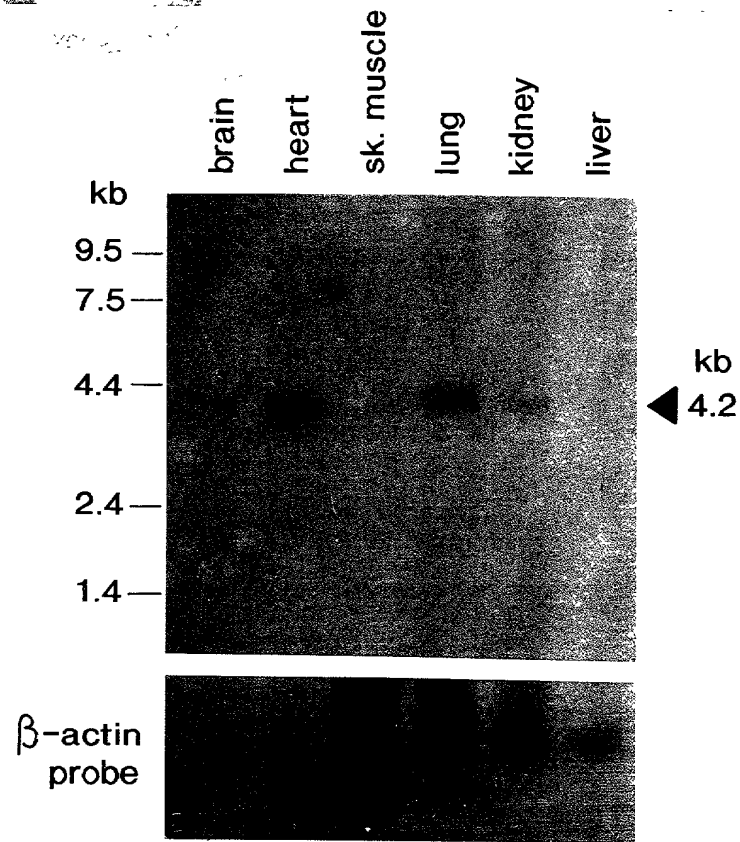


FIG. 11A

FIG. 11B

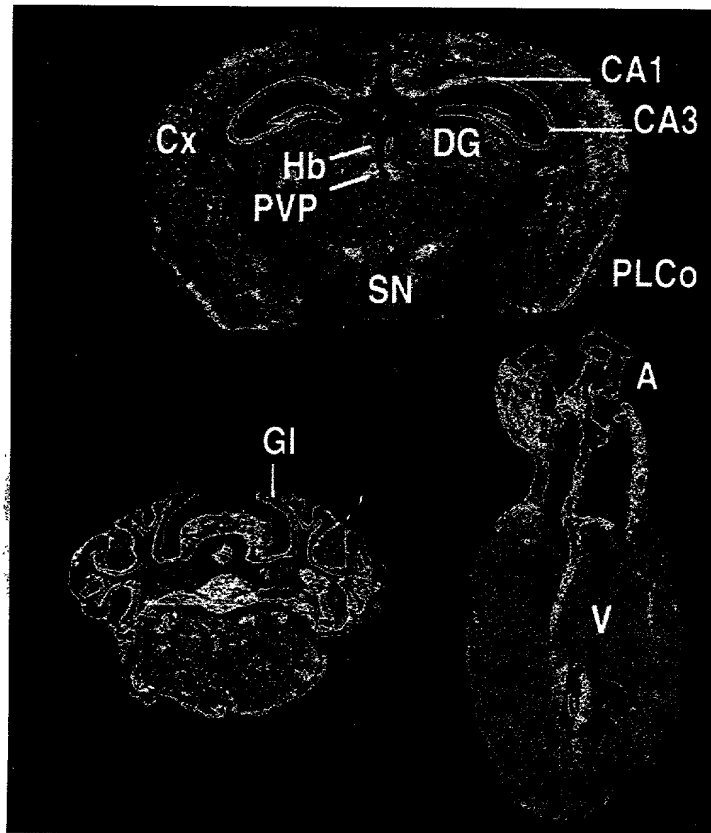


FIG. 11C

FIG. 11D



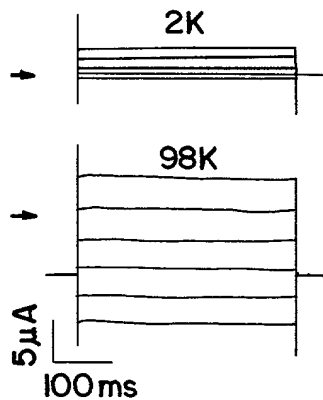


FIG. 12A

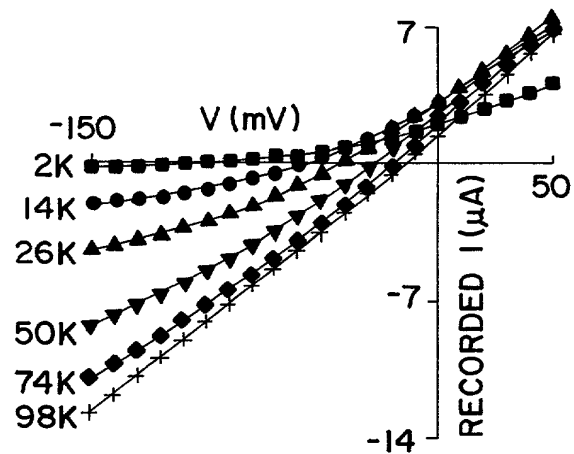


FIG. 12B

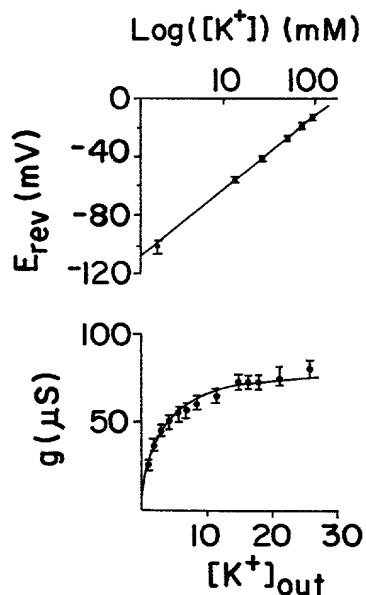


FIG. 12C

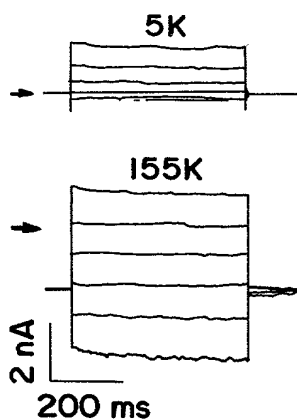


FIG. 12E

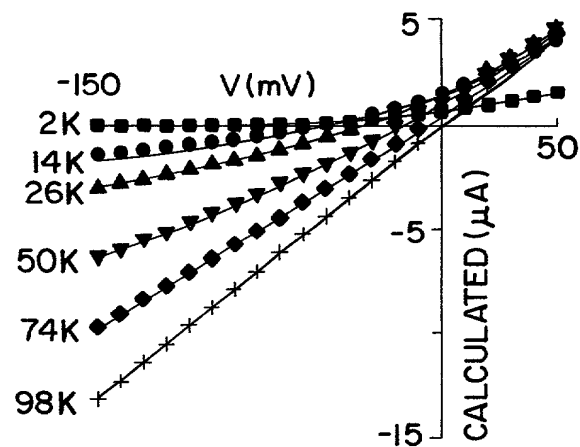


FIG. 12D

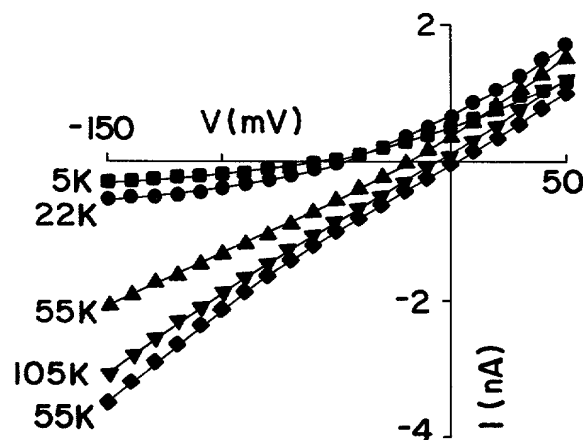


FIG. 12F

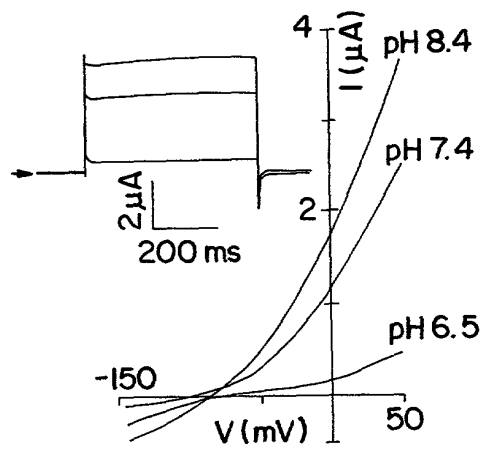


FIG. 13A

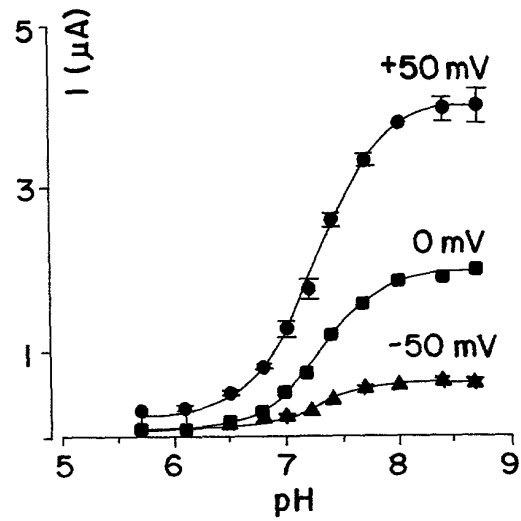


FIG. 13B

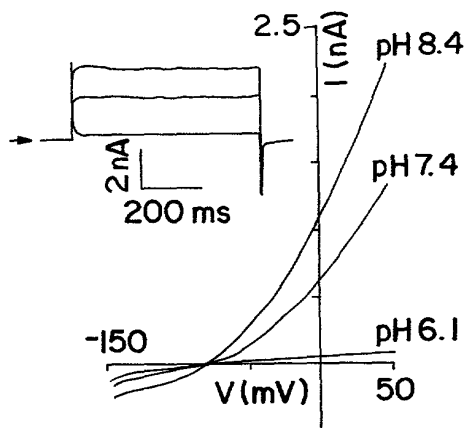


FIG. 13C

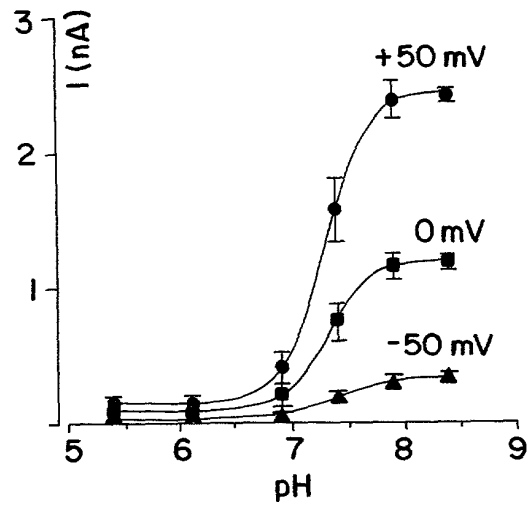


FIG. 13D